

Wherefore, having described the present invention, what is claimed is:

1. A communication system for controlling use of program related element in a user system including a memory, processor and input devices for storing the program related element and for executing a program or operating on data associated with the program related element and wherein a program related element includes at least one of a program, data or a combination of a program and data, the communication system comprising:
  - in a user system,
    - an access controller for generating requests for access to the program related element and for controlling access to the program related element, and
    - in a host facility,
      - a memory for storing
      - an authorization key controlling access by the user system to the program related element, and
      - an associated access definition including
      - a period of use definition defining a period in which the user system may access the program related element,
    - the host facility being responsive to a request for access to the program related element and to the associated access definition for communicating the authorization key and at least parts of the associated access definition to the user system when requirements of the associated access definition are met, and
    - the access controller being responsive to the authorization key and the parts of the associated use definition for allowing the user system access to the program related element in conformance with the parts of the associated use definition.
  2. The communication system of claim 1 wherein:
    - the program related element is resident in the user system.
  3. The communication system of claim 1 wherein:

the program related element is loaded into the user system from a host system.

4. The communication system of claim 1 wherein:

the program related element is transmitted into the user system  
5 from a second user system.

5. The communication system of claim 1 wherein:

the program related element is a program,  
the authorization key is an unlocking key, and  
the access controller is responsive to the unlocking key for  
10 permitting access to the program related element.

6. The communication system of claim 1 wherein:

the authorization key is a decryption key,  
the program related element is encrypted, and  
the access controller include a decryption mechanism  
15 responsive to the decryption key to decrypt the program related element to provide the decrypted program related element to the user system.

7. The communication system of claim 6 wherein:

the program related element is generated and encrypted in a  
second user system,  
20 the program related element is transmitted to the user system,  
and

an authorization key and associated access definition corresponding to the program related element is generated and stored in the host facility in association with the generation and encryption of the program  
25 related element.

8. The communication system of claim 1 wherein:

the access definition includes at least one of a start date/time and an end date/time defining a period in which access to the program related element is permitted.

9. The communication system of claim 1 wherein:

the access definition includes at least one user period defining at least one corresponding access period during which the user system may access the program related element and wherein the access controller is responsive to an access period for terminating access to the program related element at the expiration of the access period.

5           10. The communication system of claim 1 wherein:

the access definition includes conditions to be satisfied before the user system may access the program related element.

10          11. A method for controlling use of program related element in a user

system including a memory, processor and input devices for storing the program related element and for executing a program or operating on data associated with the program related element and wherein a program related element includes at least one of a program, data or a combination of a program and data, the method comprising the steps of:

15           in a host facility,

               storing an authorization key controlling access by the user system to the program related element and an associated access definition including a period of use definition defining a period in which the user system may access the program related element,

20           20           in the user system,

               generating a request for access to the program related element,

               in the host facility,

25           responding to a request for access to the program related element and to the associated access definition by communicating the authorization key and at least parts of the associated access definition to the user system when requirements of the associated access definition are met, and

30           30           in the user system,

responding to the authorization key and the parts of the associated use definition for allowing the user system access to the program related element in conformance with the parts of the associated use definition.

- 5           12. The method of claim 11 wherein:  
                 the program related element is resident in the user system.
13. The method of claim 11 further comprising the step of:  
                 loading the program related element into the user system from  
                 a host system.
- 10          14. The method of claim 11 further comprising the step of:  
                 transmitting the program related element into the user system  
                 from a second user system.
- 15          15. The method of claim 11 wherein:  
                 the program related element is a program,  
                 the authorization key is an unlocking key, and  
                 the user system is responsive to the unlocking key for  
                 permitting access to the program related element.
- 20          16. The method of claim 11 wherein:  
                 the authorization key is a decryption key,  
                 the program related element is encrypted, and  
                 the user system responsive to the decryption key to decrypt the  
                 program related element to provide the decrypted program related element  
                 to the user system.
- 25          17. The communication system of claim 16, further comprising the  
                 steps of:  
                 generating and encrypting the program related element in a  
                 second user system,  
                 generating and storing an authorization key and associated  
                 access definition in the host facility in association with the generation and  
                 encryption of the program related element, and  
                 transmitting the program related element to the user system.

18. The method of claim 11 wherein:

the access definition includes at least one of a start date/time and an end date/time defining a period in which access to the program related element is permitted.

5 19. The method of claim 11 wherein:

the access definition includes at least one user period defining at least one corresponding access period during which the user system may access the program related element and wherein the user system is responsive to an access period for terminating access to the program related element at the expiration of the access period.

10 20. The method of claim 11 wherein:

the access definition includes conditions to be satisfied before the user system may access the program related element.

15 21. A communication system for transmitting at least one of the program, the data, and a combination of the program and data from a host facility to a communication terminal device, comprising:

an input device for inputting instructions to execute the program or to process the data;

20 storage means for storing the program, the data, or a combination of the program and data;

executing means for executing the program stored in said storage means or executing data processing by using the data stored in said storage means, in accordance with instructions from said input device;

25 clock means for keeping a predetermined time period after said executing means is allowed to execute the program stored in said storage means or to execute data processing by using the data stored in said storage means; and

30 interference means for interfering with execution of said executing means when said clock means counts said predetermined time period.